TABLE II-6. CHANGES IN CBO BASELINE ESTIMATES SINCE MARCH (By fiscal year, in billions of dollars)

	1988	1989	1990	1991	1992	1993
Revenues						
March 1988 Estimate	898	954	1,036	1,111	1,181	1,261
Enacted Legislation	0	a	4	5	6	7
Economic Reestimates	19	29	27	20	17	9
Technical Reestimates	-9	-3	-4	-3	-2	-1
Total	10	26	28	22	22	14
Current Estimate	908	980	1,064	1,134	1,202	1,276
Outlays						
March 1988 Estimate	1,059	1,131	1,206	1,271	1,335	1,400
Enacted Legislation	a	5	3	5	5	7
Economic Reestimates						
Net interest	-1	-4	-8	-12	-13	-13
All other	-1	-2	-2	-1	-1	-1
Subtotal	-3	-6	-10	-14	-15	-14
Technical Reestimates						
Defense	6	4	3	2	2	2
Deposit insurance	3	4	2	1	1	1
Agriculture	-4	-7	-4	-2	-1	-2
Foreign Military Sales prepayments	3	-5	a	a	a	a
All other	-1	1	1	2	2	3
Subtotal	6	-3	1	3	3	4
Total	4	-4	-6	-6	-6	-3
Current Estimate	1,063	1,127	1,200	1,265	1,329	1,397
Deficit						
March 1988 Estimate	161	177	170	159	154	139
Enacted Legislation	a	5	-1	a	a	a
Economic Reestimates	-22	-35	-37	-34	-32	-23
Technical Reestimates	15	a	5	6	5	5
Total	-6	-29	-34	-28	-28	-18
Current Estimate	155	148	136	131	126	121

SOURCE: Congressional Budget Office.

NOTE: The March 1988 baseline contained projections only through fiscal year 1993.

a. Less than $500 million.

smaller. These include, most notably, additional corporate income taxes resulting from higher taxable profits; higher deposits of earnings by the Federal Reserve as a result of higher short-term interest rates; reduced customs duties from lower merchandise imports; lower payroll taxes from the self-employed; and, finally, lower unemployment insurance system revenues resulting from continued low unemployment, which enables states to reduce unemployment insurance taxes. These factors add slightly to revenues in 1989 and 1990, but tend to offset each other in later years.

The data that became available in late July in the three-year revisions of the National Income and Product Accounts contained substantial upward revisions in wages and salaries for 1987 and especially for the first half of 1988. The revised figures showed that total U.S. output was significantly higher than previously thought, and also that wages and salaries claimed an even bigger piece of the economic pie. These new data confirmed what withheld income and payroll taxes had suggested since the start of the fiscal year: employment and income have been persistently higher than earlier statistics had indicated. The increase in 1988's wage and salary share, when projected to subsequent years, generates roughly $7 billion a year in additional taxes in 1989 through 1991 and greater amounts thereafter.

The drought, which has been reflected in the CBO forecast, is expected to have little overall impact on tax receipts. While the dollar effect on revenues cannot be calculated--too many uncertainties exist--the most likely effect is a very minor reduction in revenues in 1988, because farm income is reduced, and an equally minor increase in 1989. Many of the taxes on livestock sales caused by this summer's drought will be deferred. With a return of normal weather next year, and with more land brought into production, farm income is expected to rise. Over the longer run, incomes and tax revenues are likely to be unaffected by the drought.

The new economic assumptions also affect projections of federal spending. Cost-of-living adjustments are slightly lower, even despite drought-induced increases in consumer prices. Unemployment insurance outlays are lower, mainly in 1988 through 1990. Interest costs are down, primarily in response to lower borrowing requirements. CBO had correctly anticipated a rise in interest rates, so that only small revisions in the interest rate forecast proved necessary.

BOX II-4
THE CATASTROPHIC HEALTH CARE BILL

The Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360) was signed into law on July 1, 1988. The new law marks the largest expansion of Medicare benefits since the program began more than 20 years ago. In a major departure from previous practice, the new benefits established by the bill are entirely financed by premiums and additional income taxes paid by participants. Both benefits and contributions are phased in during the 1989-1993 period, as shown in the table.

BUDGETARY EFFECTS OF THE CATASTROPHIC CARE BILL
(By fiscal year, in billions of dollars)

	1989	1990	1991	1992	1993
Costs					
Hospital Insurance	1.2	1.9	2.1	2.3	2.5
Supplementary Medical Insurance	0.1	2.2	3.6	4.3	4.9
Drug Insurance	a	0.1	0.9	1.9	2.7
Medicaid and Other	a	0.4	0.5	0.5	0.5
Total	1.4	4.6	7.2	8.9	10.6
Financing					
Premiums	1.1	1.8	2.7	3.6	4.1
Income Taxes	0.3	4.2	4.9	5.7	6.5
Total	1.4	6.1	7.6	9.2	10.6
Net Budget Effect					
Effect on Deficit	-0.1	-1.4	-0.5	-0.3	a

SOURCE: Congressional Budget Office.

NOTE: Costs and net budget effect include administrative expenses that are subject to future appropriation.

a. Less than $50 million.

Continued

Most of the *Hospital Insurance (HI)* benefits (Part A of Medicare) take effect on January 1, 1989. Acute-care hospital coverage will be unlimited. In contrast to current rules, Medicare participants will no longer face a limit on paid hospital days; furthermore, Medicare will pay all hospital costs after an initial deductible, while under the current arrangement patients must share costs after 60 days. The new law also expands benefits for skilled nursing facilities, home health care, and hospice care.

The *Supplementary Medical Insurance (SMI)* provisions (Medicare Part B) are the most costly part of the legislation over the 1989-1993 period, as shown in the table. The new law caps enrollees' copayment costs for covered services (primarily visits to physicians). The cap is $1,370 in 1990, and will be adjusted annually. In the absence of the cap, about 7 percent of participants would face higher copayment costs. The program will pay for mammography examinations, and will pay for occasional home help to relieve family caretakers who are responsible for a homebound patient if they meet certain eligibility rules.

Finally, the new law expands benefits to include outpatient *prescription drugs* (also under Part B of Medicare). Coverage is limited to intravenous and immunosuppressive drugs in 1990. Beginning in 1991, the program will pay increasing shares of other prescription drugs.

The new law also affects *Medicaid*, the joint federal/state health program for needy persons. Medicaid will be required to pay Medicare premiums and copayments for all enrollees below the poverty level; this cost to Medicaid is substantially offset because Medicare will increasingly assume some costs that Medicaid now pays. Other Medicaid provisions ease the financial burden on the spouses of beneficiaries in nursing homes, and expand coverage for infants and pregnant women in poor families.

Before passage of the new act, Medicare benefits were financed by a mixture of payroll taxes on active workers, enrollee premiums, and general revenues. The new benefits, in contrast, are paid for entirely by participants. About 37 percent of financing for the new benefits will come from additional monthly premiums paid by all Part B enrollees. The added premiums will grow from $4.00 a month in 1990 to $10.20 a month in 1993. Total premiums in 1993--including those under previously enacted laws--are estimated to be slightly over $40 a month. The remaining costs are financed by an income tax surcharge, also known as a supplemental premium. Roughly 40 percent of enrollees will pay the surtax, which climbs to an additional 28 percent of their income tax liability (subject to a cap) by 1993. To some extent, enrollees can offset their new Medicare costs by curtailing their supplemental private insurance, commonly called Medigap insurance.

Technical revisions, on balance, worsen the deficit slightly in all years except 1989. Technical changes in revenues, totaling $3 billion to $4 billion a year in 1989 through 1991 and smaller amounts thereafter, reflect mainly the observed shortfall in corporate income tax receipts that has persisted for the past two years. (The downward revision for 1988, about $9 billion, reflects the same shortfall.) Until detailed data on 1987 corporate receipts become available in the next two years, however, there is no way to ascribe the shortfall to specific industries or provisions of tax law.

As shown in Table II-6, technical changes in outlays are dominated by a few categories of spending. One revision results mainly from updated assumptions about prepayments of Foreign Military Sales loans; previously assumed to occur in 1988, these prepayments now appear likely to be spread over several years. In addition, under final regulations, more countries will find it advantageous to prepay. Another revision is most important early in the projections: the drought reduces agriculture outlays mainly in 1988 and 1989. Longer-run projections of Commodity Credit Corporation spending have also been reduced, however, to reflect underlying improvement in the farm economy. Estimates of defense spending are up in all years, reflecting higher spending from new budget authority and from unobligated balances, and deposit insurance costs are even higher than projected last winter. The Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation--both programs that, in the past, generally reduced the deficit--together are projected to incur outlays of more than $7 billion in 1989 and somewhat less in later years. Estimates of deposit insurance outlays are highly uncertain; no one knows the timing or amount of spending that will be needed to deal with insolvent financial institutions.

THE ECONOMY AND THE BUDGET

The federal budget is closely linked to the nation's economy. Revenues depend mainly on wages and salaries, corporate profits, and other taxable incomes. Most benefit programs are linked directly or indirectly to inflation, and some are sensitive to the unemployment rate. In its baseline projections, CBO also assumes that annual appropriations grow apace with inflation. Finally, the Treasury's huge

volumes of debt financing and refinancing make the budget projections highly sensitive to interest rates.

As discussed in Chapter I, the economic assumptions underlying the budget projections represent CBO's best estimates about economic performance through the end of 1989. Beyond 1989, forecasts of economic performance are impractical; instead, CBO develops projections based on historical trends, as discussed in Chapter I. Real interest rates, and the gap between actual and potential GNP, approach their historical averages, while inflation rates are held constant at their historical averages. These projections do not rule out a recession; but the next recession's timing is impossible to predict. Unless the next recession is unusually deep, it would be consistent with the average long-run growth path described here.

Alternative Economic Assumptions

CBO's short- and medium-term economic assumptions are close to the middle of the road. Some forecasters are more optimistic; some more pessimistic. But the projections are sensitive to the economic assumptions employed. Real economic growth is one of the most important economic variables affecting the budget projections, helping to determine revenues, spending for benefit programs such as unemployment insurance, and--indirectly--the cost of interest on the debt. If real growth exceeds CBO's assumption by a full percentage point each year beginning in October 1988, the deficit would be lower by an estimated $10 billion in 1989, $27 billion in 1990, and $138 billion in 1994. (The resulting real growth rate, averaging almost 3.5 percent a year, is well outside the consensus of economic forecasters.) Interest rates significantly affect the government's cost of financing its debt but are notoriously difficult to forecast. If interest rates are one percentage point higher than CBO assumes for the next six years--a relatively small error--interest outlays would be higher by an estimated $5 billion in 1989, $11 billion in 1990, and $27 billion in 1994.

OMB's long-run deficit projections are significantly lower than CBO's and illustrate the importance of economic assumptions. In 1993--the final year included in OMB's midsession review--the Administration projects a deficit under current policies of $53 billion, almost $70 billion lower than CBO's estimate. Much of the difference

stems from the Administration's assuming higher real economic growth and lower real interest rates than does CBO. The long-run economic projections used by CBO, however, are much closer to the consensus of private economists than are the Administration's.

How Economists Measure the Budget: The National Income and Product Accounts

Economists often measure the federal government's activities in ways that differ from the budget's treatment. Economists typically look at all receipts collected by the government from various sectors, including taxes, fees, insurance premiums, and so forth--a measure somewhat broader than federal budget revenues. They also divide spending into categories with different implications for the economy: defense and nondefense purchases (which enter directly into GNP), transfer programs (which do not directly use resources but instead support disposable income), grants to state and local governments, interest, and subsidies. The National Income and Product Accounts (NIPA) describe the federal government's activities in these terms. Using the NIPA definitions enhances analysis of the total (federal, state, and local) government sector, and makes international comparisons easier as well. The NIPA measures are also less influenced than the budget by certain one-time savings, such as asset sales or timing shifts.

In *The Economic and Budget Outlook: Fiscal Years 1989-1993* (February 1988), CBO described major differences between the budget and the NIPA and presented its budget projections in NIPA terms. Tables II-7 and II-8 update those projections. Table II-7 shows adjustments needed to put budget totals on a NIPA basis, and Table II-8 presents the baseline projections using the NIPA categories.

Two recent developments have special impacts on the NIPA projections. First, the drought dramatically reduces the government's stockpiles of grain. This translates into negative purchases by the Commodity Credit Corporation, depressing total nondefense purchases in 1988 and 1989. (The drought also affects CCC subsidies--that is, deficiency payments--as well as CCC's operating deficit, measured in the NIPA as the difference between CCC transaction

prices and market prices.) Second, the recent catastrophic health bill significantly increases the premiums paid by Medicare enrollees in return for additional benefits. The budget treats these as negative outlays; in the NIPA, however, they appear as government receipts, part of the netting and grossing adjustment that raises federal expenditures and receipts by equal amounts.

TABLE II-7. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR OF THE NATIONAL INCOME AND PRODUCT ACCOUNTS (By fiscal year, in billions of dollars)

	1988	1989	1990	1991	1992	1993	1994
Receipts							
Total Revenues	908	980	1,064	1,134	1,202	1,276	1,354
Differences							
Government contributions for employee retirement	38	40	43	46	49	52	55
Medicare premiums	9	11	13	15	16	18	19
Other netting and grossing	10	10	10	10	10	11	11
Geographic exclusions	-3	-3	-3	-3	-3	-3	-3
Other	4	-2	2	a	2	2	2
Total Federal Sector NIPA Receipts	966	1,037	1,130	1,202	1,277	1,354	1,437
Expenditures							
Total Outlays	1,063	1,127	1,200	1,265	1,329	1,397	1,475
Differences							
Lending and financial transactions	-11	-15	-15	-13	-12	-10	-12
Government contributions for employee retirement	38	40	43	46	49	52	55
Medicare premiums	9	11	13	15	16	18	19
Other netting and grossing	10	10	10	10	10	11	11
Defense timing adjustment	4	3	3	3	3	3	3
Bonuses on Outer Continental Shelf land leases	1	1	1	1	1	1	1
Geographic exclusions	-6	-6	-7	-7	-7	-8	-8
Other	-5	-1	1	-2	-2	-2	-2
Total Federal Sector NIPA Expenditures	1,103	1,171	1,249	1,317	1,386	1,460	1,541

SOURCE: Congressional Budget Office.

a. Less than $500 million.

TABLE II-8. PROJECTIONS OF BASELINE REVENUES AND EXPENDITURES ON A NATIONAL INCOME AND PRODUCT ACCOUNTS BASIS (By fiscal year, in billions of dollars)

	1988	1989	1990	1991	1992	1993	1994
Receipts							
Personal Tax and Nontax Receipts	418	441	486	523	560	599	638
Corporate Profits Tax Accruals	111	127	142	149	155	161	168
Indirect Business Tax and Nontax Accruals	56	59	60	58	59	61	63
Contributions for Social Insurance	381	410	442	472	503	534	568
Total Receipts	966	1,037	1,130	1,202	1,277	1,354	1,437
Expenditures							
Purchases of Goods and Services	381	396	416	434	452	472	492
Defense	298	306	315	328	343	357	373
Nondefense	83	91	101	106	109	114	120
Transfer Payments	431	464	505	542	581	623	667
Grants-in-Aid to State and Local Governments	107	116	122	129	135	145	154
Net Interest Paid	151	164	179	188	192	197	202
Subsidies Less Current Surplus of Government Enterprises	33	32	26	23	25	23	25
Total Expenditures	1,103	1,171	1,249	1,317	1,386	1,460	1,541
Deficit							
Deficit	137	134	119	115	109	105	104

SOURCE: Congressional Budget Office.

APPENDIXES

APPENDIX A

THE EFFECT OF COMPUTER AND PETROLEUM PRICES ON NIPA MEASURES OF REAL GROWTH

Although the prices of most goods and services have risen about 20 percent since 1982, computer and petroleum prices have fallen. The wide divergence in price changes between these commodities and other goods since the 1982 base year for the National Income and Product Accounts (NIPA) introduces possible distortions in the calculation of real growth rates for GNP, and for final sales, investment, and other subcategories of GNP. If the NIPA base year was set to be 1987, the reported growth of real (inflation-adjusted) final sales in the first half of this year would probably have been lower by almost one percentage point than the figure actually reported.

The problem is best illustrated by examining the effect computers have had on the growth of real equipment purchases by firms. The share of office equipment (which is primarily computers) in total purchases of equipment was 9.3 percent in 1982 in nominal (current) dollars, and, because all price indexes are set equal to 1.00 in that year for the NIPA data, the share in real dollars was the same.[1] In the first half of 1988, however, office equipment was equal to about 12 percent of total purchases of producers' durable equipment in nominal terms and over 28 percent in real terms.

The large increase in office equipment as a share of real purchases of total equipment since 1982 is a result of the fall in prices for office equipment (mainly computers) relative to total equipment prices. In constructing the price index for computer equipment purchases, the Bureau of Economic Analysis (BEA) incorporates a quality adjustment to computer prices.[2] This adjustment, which has considerable economic justification, has caused the price index to follow a downward trend since 1969, reflecting rapid technological advances. As a

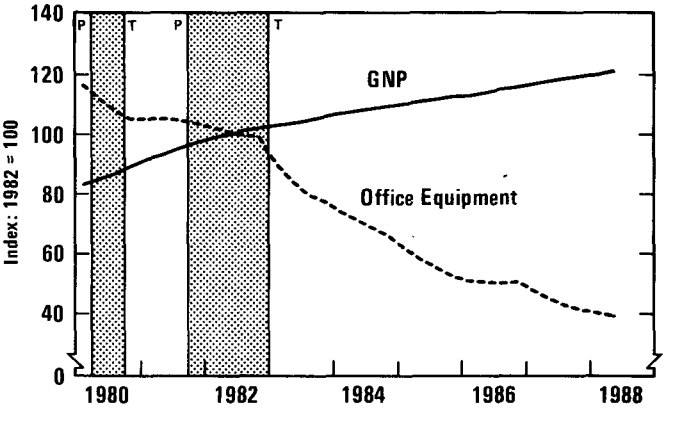
1. Although the price indexes are set equal to 1.00 in 1982 for calculating real values, by convention the series are multiplied by 100 for reporting purposes.

2. For an explanation of this quality adjustment, see David W. Cartwright, "Improved Deflation of Purchases of Computers," *Survey of Current Business* vol. 66 (March 1986), pp. 7-10.

result, the implicit price deflator for office equipment (mainly computers) currently stands at just 0.39, that is, 39 percent of its 1982 level, as shown in Figure A-1. (Real values for detailed GNP components are calculated as nominal values divided by their corresponding price indexes. Implicit price deflators for aggregates are the sums of nominal values of components divided by the corresponding sums of real values.) The implicit price deflators for other categories of producers' durable equipment average about 1.14. The difference between the level of the implicit price deflator for office equipment and that for other equipment amplifies current dollar fluctuations of computer purchases into substantially larger real movements; for example, a $1 increase in office equipment purchases, when divided by a deflator of 0.39, results in a real value of $2.56, whereas $1 spent on other kinds of equipment would result in only $0.88 in real terms. In this way, the recent growth rates of real equipment purchases and, in fact, of any NIPA category that includes computers tend to be overstated.

If the base year for the NIPA data were closer to 1988, computers would not have such a large weight in real producers' durable equipment this year and, consequently, they would not have such a large effect on real growth measures. When NIPA data are rebased to 1987, for that year, all implicit price deflators will be set equal to 1.00, the share of any category of investment in producers' durable equipment will be based on the current dollar share, and a $1 increase in any cat-

Figure A-1.
Comparison of the Implicit Price Deflators for GNP and Office Equipment



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

egory of producers' durable equipment will result in only a $1 increase in real terms.[3] Therefore, given the large relative movements in prices since 1982, the choice of base year affects the implicit price deflators and real growth measures. In general, the use of a base year close to the period being examined will yield more useful measures of real growth rates.

The Congressional Budget Office has estimated the effect of the relative price changes since 1982 on recent measures of real growth by rebasing NIPA data to 1987. When BEA rebases the NIPA data in 1990, it will use information on approximately 600 different categories of final demand. Because CBO has estimated the effect of rebasing using a much smaller number of categories, these results should be considered tentative, although they provide an idea of the effect of changes in relative prices on measures of real growth.[4]

The rebasing carried out by CBO indicates that there is a significant difference between the 1982-based and the 1987-based measures of real final sales growth in the first half of 1988. CBO estimates that real final sales growth in the first half of this year is about 0.8 percentage point lower in 1987 dollars than in 1982 dollars (see Figure A-2). The growth rate of the implicit price deflator for final sales is correspondingly higher.

Because computers and petroleum are important in foreign trade, the choice of base year affects measures of real imports and exports as well. When rebased to 1987, the growth rates of both real imports and real exports were reduced for recent years (see Figure A-2). The growth rates were lowered because computers, for which the value of imports and exports grew rapidly throughout this period, were given less weight in aggregate real imports and exports than in the 1982-based measure. The growth rate of real imports was also affected by the smaller weighting given to petroleum imports in the 1987-based

3. BEA currently plans to rebase NIPA data to 1987 in 1990. Data revisions and definitional changes will also be incorporated in the rebenchmarked data.

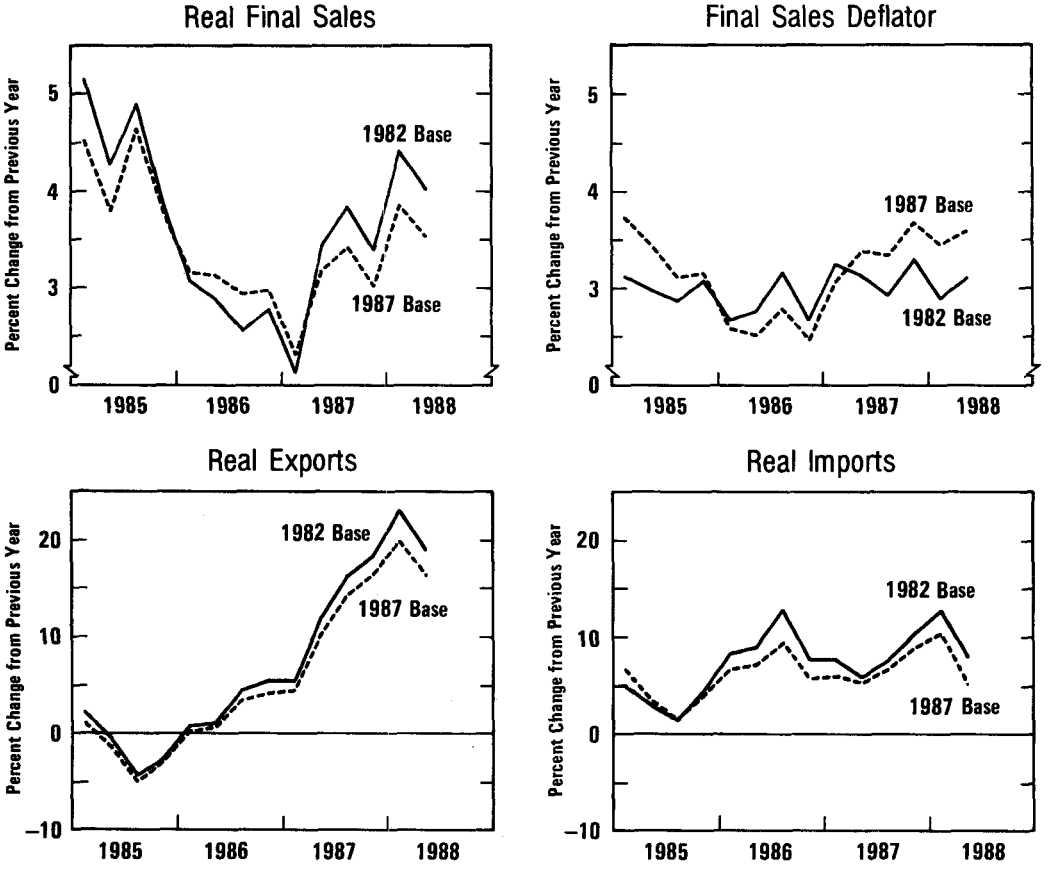
4. This calculation was performed by disaggregating final sales--excluding Commodity Credit Corporation (CCC) purchases--into 30 expenditure categories, rebasing the individual deflators for each category to 1987, and reaggregating using these deflators. Inventory change and CCC purchases were not included because data for disaggregation and rebasing were not available.

measure. The growth rates of the implicit price deflators for exports and imports were correspondingly reduced.

In general, when compared with the 1982-based measures, the 1987-based data present a picture of slower real economic growth in the first half of this year. Recent real growth in investment, productivity, and a number of other areas may also be overstated in the published data as a result of the changes in relative prices since 1982, complicating the assessment of the current strength of the economy.

Figure A-2.

The Effect of Rebasing on Measures of Real Growth



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

APPENDIX B

FARM COMMODITY PROGRAM SPENDING

The drought that is affecting this summer's crop production has led to large downward adjustments in the Congressional Budget Office's projections of farm price and income support spending by the U.S. Department of Agriculture through its Commodity Credit Corporation (CCC). CBO now projects that CCC outlays will total $12.3 billion during 1988, rise to $13.4 billion in 1989, fall to just below $12.5 billion in 1990 and 1991, and then gradually decline to $9.6 billion by 1994 (see Table B-1).[1] Last March, before the beginning of the drought, CBO projected CCC outlays of $17.0 billion in 1988 and $17.4 billion in 1989.

CCC outlays would have been far lower in 1989 without the $4.5 billion in added spending caused by the Disaster Assistance Act of 1988. Almost all of the costs of this legislation occur in 1989 and are direct payments made to farmers and ranchers who have suffered crop losses because of the drought. In addition to CCC costs, the Disaster Assistance Act of 1988 will increase fiscal year 1989 spending by an estimated $0.6 billion mainly by providing additional Farmers Home Administration loans to farmers in disaster areas.

Several factors other than the drought have caused changes in the CBO baseline projections. Weaker markets for cotton and rice than previously expected have caused projections for cotton program outlays to be raised by $1.1 billion and rice program outlays by $0.3 billion for 1989. Reestimates in these crop program outlays are smaller in subsequent years.

Also unrelated to the drought, CBO has raised by relatively small amounts the projected prices of wheat and feed grains for future years.

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1. Current law governing most farm programs expires in 1990. The CBO baseline projection for CCC outlays assumes that the current farm law is extended beyond its expiration and that target prices, which are used to calculate deficiency payments made to farmers, continue to decline. For a general explanation of the assumptions underlying the baseline, see Congressional Budget Office, *The Outlook for Farm Commodity Program Spending, Fiscal Years 1988-1993* (June 1988).

The increases, which average $0.15 per bushel for corn and $0.20 per bushel for wheat over the 1989-1993 crop years, cause projected CCC outlays to drop by over $2 billion annually. CBO increased price projections after reviewing market prices for 1987 crops. Projected market prices are still low by historical standards and reflect the assumption that the Secretary of Agriculture would operate the farm programs to maintain these low prices and keep U.S. wheat and feed grain crops competitive in world markets.

The CCC relies on a combination of program elements to affect farm production, commodity prices, and federal program costs. Acreage reduction and paid land diversion programs, under which producers agree to idle certain portions of cropland, can be used to reduce production of wheat, feed grains, cotton, and rice. Nonrecourse loans, which allow producers to pledge crops as collateral, are used to support prices of wheat, feed grains, and soybeans, and export subsidies are used to increase exports (mostly of wheat) by reducing the price to

TABLE B-1. CBO PROJECTIONS FOR COMMODITY CREDIT CORPORATION OUTLAYS
(By fiscal year, in millions of dollars)

Commodity	1988	1989	1990	1991	1992	1993	1994
Corn and Other Feed Grains	8,185	1,735	5,521	6,636	5,751	5,546	5,349
Wheat	767	753	1,731	1,664	1,635	1,274	1,093
Rice	335	961	1,010	1,041	1,013	940	922
Upland Cotton	748	2,472	1,699	1,084	734	540	472
Soybeans	-1,667	-282	78	27	26	26	27
Dairy	1,343	884	698	604	535	527	519
Other Commodities	-238	-177	-149	65	130	114	114
Subtotal	9,474	6,346	10,588	11,121	9,824	8,967	8,496
Other Outlays	2,857	2,512	1,404	1,195	1,132	1,128	1,125
Disaster Assistance Act of 1988	0	4,525	190	90	30	0	0
Total	12,331	13,383	12,182	12,406	10,986	10,095	9,621

SOURCE: Congressional Budget Office.

foreign buyers. In addition, stocks owned by the CCC can be released to the market to increase available supplies and reduce market prices.

The Secretary of Agriculture has broad discretion in choosing how program tools are used. Before this summer's drought, CBO assumed that the Secretary would attempt to keep prices for wheat and feed grains relatively low to encourage exports while restricting current production to reduce the excessive government stocks that had accumulated in previous years. This would be done initially by making government-owned grain available to the market while restricting current production through the acreage reduction program. After excess stocks had been reduced, the acreage reduction requirements for producers would be relaxed to allow greater current production.

The drought has accelerated the reduction of excess stocks--particularly of corn, but also of wheat. This rapid stock reduction allows future acreage reduction programs to be smaller. Each year's needs are now projected to be met completely by current production rather than by supplementing production with stocks in storage from earlier years. Smaller acreage reduction programs in the future will benefit producers of wheat and feed grains because less land will have to be idled to qualify for government programs. As a result, the amount of each producer's crop eligible for deficiency payments and other program benefits will increase, leading to greater net returns for producers--and higher government costs with other factors held constant. Eliminating excess government stocks quickly now may later be seen by some producers as a benefit of this drought: a natural event is doing what several years of relatively restrictive acreage control programs would have accomplished.

CBO projects that general market conditions for the major supported farm commodities will gradually improve following the 1988 crop year. Table B-2 shows projected supply, use, and prices for these commodities.[2] In these projections, normal weather conditions are assumed to prevail for crops harvested in 1989 and later years.

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2. For corresponding commodity supply, use, and price assumptions underlying the March 1988 baseline projections, see Congressional Budget Office, *The Outlook for Farm Commodity Program Spending, Fiscal Years 1988-1993*, Summary Table 2, p. xv.

TABLE B-2. CBO PROJECTIONS FOR THE SUPPLY, USE, AND PRICE OF MAJOR FARM COMMODITIES SUPPORTED BY THE COMMODITY CREDIT CORPORATION (By crop year)

	1988	1989	1990	1991	1992	1993
			Corn			
			(In billions of bushels)			
Production	4.70	7.39	7.74	8.13	8.21	8.45
Exports	1.58	1.76	1.87	1.98	2.05	2.11
Total Use	7.00	7.51	7.75	8.06	8.25	8.40
Ending Stocks	2.13	2.01	1.99	2.07	2.03	2.08
Price (Dollars per bushel)	2.80	1.94	1.89	1.80	1.82	1.86
			Wheat			
			(In billions of bushels)			
Production	1.84	2.63	2.62	2.65	2.69	2.73
Exports	1.31	1.50	1.54	1.55	1.56	1.58
Total Use	2.38	2.58	2.67	2.63	2.69	2.73
Ending Stocks	0.74	0.80	0.77	0.80	0.81	0.82
Price (Dollars per bushel)	3.71	3.04	3.07	3.09	3.11	3.12
			Rice			
			(In millions of cwt)			
Production	159.1	161.4	174.0	182.9	183.4	199.1
Exports	74.9	77.0	80.4	84.6	86.8	87.5
Total Use	160.3	166.9	175.6	185.3	192.9	198.5
Ending Stocks	33.5	31.2	32.8	33.5	27.2	31.0
Price (Dollars per cwt)	5.90	6.20	6.00	5.85	6.05	6.25
			Cotton			
			(In millions of bales)			
Production	13.5	12.2	12.4	12.9	13.2	13.7
Exports	4.6	5.7	5.8	6.1	6.0	6.1
Total Use	11.6	13.6	13.3	13.8	13.7	13.8
Ending Stocks	7.3	6.1	5.3	4.5	4.1	4.1
Price (Dollars per pound)	0.423	0.450	0.558	0.571	0.652	0.648
			Soybeans			
			(In billions of bushels)			
Production	1.63	2.08	2.04	2.04	2.09	2.11
Exports	0.60	0.73	0.73	0.72	0.74	0.75
Total Use	1.78	2.04	2.04	2.04	2.07	2.10
Ending Stocks	0.14	0.18	0.18	0.18	0.19	0.20
Price (Dollars per bushel)	7.96	5.69	5.85	6.03	5.88	5.85
			Dairy Products[a]			
			(In billions of pounds)			
Production	144.1	145.5	146.3	148.8	150.0	151.5
Commercial Use	135.0	137.8	140.2	142.9	145.5	147.7
CCC Removals[b]	9.4	8.0	6.4	6.3	4.9	4.2
Price Support[c] (Dollars per cwt)	10.60	10.60	10.10	9.60	9.10	9.10

SOURCE: Congressional Budget Office.

NOTE: cwt = hundredweight.

a. Dairy products are reported by fiscal year.

b. Removals refer to net government purchases of dairy products for the purpose of supporting the farm price of milk.

c. The price support is in effect for the 12 months following January 1 of each year, except for 1989, when the price support for April through June rises to $11.10.

Corn. CBO projects that the drought will reduce the 1988 corn crop to 4.7 billion bushels from the 7.3 billion bushels projected last March. Prices are expected to average $2.80 per bushel during the 1988 crop year, 57 percent above earlier expectations. Corn stocks are expected to fall to 2.13 billion bushels by the end of the 1988 crop year (August 1989), less than three-fifths of the level projected last March. Even with no paid land diversion and lower requirements for acreage reduction, stocks are projected to remain around 2 billion bushels through 1993. With government-held stocks projected to fall sharply, free stocks held by farmers and users are expected to rise. CCC outlays for all feed grains are projected to fall to $8.2 billion in 1988, down from the $13.1 billion projected last March. By 1993, outlays are projected to be $5.5 billion, 70 percent of earlier expectations.

Wheat. Because of the extreme damage to the spring wheat crop, wheat prices are expected to rise from $2.57 per bushel for 1987 to $3.71 during the 1988 crop year (ending May 1989). Stocks at the end of 1988 are now expected to fall by over 40 percent from 1987, and a major drop in required acreage reduction was announced for 1989. Prices in later years are projected to fall back to the $3.00-per-bushel range, moving up marginally each year. Even with prices in the 1990-1993 period higher than projected last March, use is expected to be slightly higher than previously thought. Stocks are projected to remain around 800 million bushels, held almost entirely as free stocks by farmers and users. Cash outlays for 1990 and later years are higher than projected last March because CBO now anticipates that deficiency payments will be made in cash rather than in generic commodity certificates, most of which were expected to be redeemed in corn.[3] Also, with only a 5 percent acreage reduction requirement, a large part of the crop is eligible for deficiency payments.

Cotton and Rice. The projected prices for 1988 crops of cotton and rice have been reduced since last March, leading to sharp increases in projected CCC outlays for these crop programs in 1989. The current projection for ending stocks of cotton through 1990 is higher than last March's, with lower demand expected. For rice, the supply and de-

3. Generic commodity certificates are sometimes issued to CCC program participants instead of cash. When they are issued to producers of one crop, subsequently sold, and redeemed by producers of another crop, generic certificates cause an understatement or overstatement of actual spending levels for individual crop programs. For a complete explanation, see Congressional Budget Office, *The Outlook for Farm Commodity Program Spending, Fiscal Years 1988-1993*, p. 10.

mand situation is similar to that projected in March. However, expected world prices are lower now than last March. Prices are substantially reduced from previous expectations for most years. In contrast with wheat and feed grains, the acreage reduction requirements for cotton and rice are projected to be higher than anticipated last March.

Soybeans. CBO projects that the drought will reduce soybean production for 1988 to 1.63 billion bushels (18 percent below the projection last March). Farm prices are expected to average nearly $8.00 per bushel during the 1988 crop year, 40 percent above earlier expectations. Soybean prices in subsequent years are projected to average $5.85 per bushel, assuming a return to normal weather. The soybean program is still projected to have a minimal effect on CCC outlays for most years. The drought has caused offsetting receipts in the soybean program to be substantially greater than projected last March because high prices and strong demand have increased both the volume of government loans repaid and the value of CCC sales of soybean stocks.

Dairy. The dairy program has been modified by the Disaster Assistance Act, contributing to higher expected outlays. The milk support price for 1989 will remain at $10.60 per hundredweight, instead of dropping to $10.10 as previously projected. For three months--April through June 1989--the support price will rise to $11.10 per hundredweight. Without the support price changes mandated in the act, outlays are projected to total $0.9 billion in 1989. The Disaster Assistance Act of 1988 will add an additional $240 million in outlays. In later years, outlays are expected to fall as additional price support reductions help to balance dairy production with consumption.

APPENDIX C

MAJOR CONTRIBUTORS TO THE REVENUE AND SPENDING PROJECTIONS

The following analysts prepared the revenue and spending projections in this report:

Revenue Projections

Mark Booth	Corporate income taxes, Federal Reserve System earnings
Jon Hakken	Windfall profit tax
Richard Kasten	Individual income taxes
Eric Nicholson	Excise taxes
Kathleen O'Connell	Individual income taxes, estate and gift taxes
Marianne Page	Customs duties, miscellaneous receipts
Linda Radey	Social insurance contributions, excise taxes
Frank Sammartino	Individual income taxes

Spending Projections

Defense and International Affairs

Eugene Bryton	Defense
Kent Christensen	International Affairs
Raymond Hall	Defense
Barbara Hollinshead	Defense
William Myers	Defense
Amy Plapp	Defense
Joseph Whitehill	International affairs
Ben Wolters	Defense

Spending Projections (continued)

Human Resources

Paul Cullinan	Social Security
Richard Curley	Supplemental Security Income, veterans' education
Cathy Ellman	Foreign Service Retirement
Alan Fairbank	Hospital Insurance
Holly Harvey	Suppmenentary Medical Insurance
Lori Housman	Public Health Service
Deborah Kalcevic	Education
Jean Kayser	Health programs
Julia Isaacs	Food Stamps, child nutrition
Donald Muse	Medicaid, Medicare
Michael Namian	Social services
Janice Peskin	Aid to Families with Dependent Children, child support enforcement
Michael Pogue	Unemployment Insurance, training programs, Civil Service Retirement
Kathleen Shepherd	Veterans' benefits

Natural and Physical Resources

Kim Cawley	Energy
Carol Cohen	Community and regional development
Douglas Criscitello	Commerce, disaster relief and insurance
Peter Fontaine	Energy
Theresa Gullo	Water resources, conservation, and land management
James Hearn	General government, Agriculture Credit Insurance Fund, Outer Continental Shelf receipts
Hsin-Hui Hsu	Agriculture
Mary Maginniss	Postal Service, deposit insurance, Small Business Administration
Eileen Manfredi	Agriculture

Spending Projections (continued)

Natural and Physical Resources (continued)

Marjorie Miller	Transportation
Andrew Morton	Agriculture
Deborah Reis	Recreation, pollution control water transportation
Mitchell Rosenfeld	Air transportation, justice
Brent Shipp	Housing and Mortgage credit
Michael Sieverts	Science and space, justice, other natural resources

Other

Janet Airis	Appropriation bills
Edward Blau	Appropriation bills
Kim Burke	Budget process
Paul Christy	Other interest
David Elkes	National Income and Product Accounts
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support
Danila Girerd	Credit analysis
Glen Goodnow	Authorization bills
Vernon Hammett	Computer support
Sandra Hoffman	Computer support
Richard Krop	Civilian agency pay
Fritz Maier	Computer support
Roy Meyers	Budget process
Rodney Rasmussen	Budget projections
Kathy Ruffing	Treasury borrowing, interest, and debt
Robert Sempsey	Appropriation bills
Robin Seiler	Budget process
Jeff Swersey	Computer support
Karla Trujillo	Appropriation bills
Paula Wiliams	Computer support

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